LV.—On Campylonema, a new Genus of Polyzoa. By the Rev. THOMAS HINCKS, B.A., F.R.S.

[Plate XX. fig. 5.]

On stones and stems of seaweed collected from the Capstone at Ilfracombe a minute Polyzoon has occurred to me not uncommonly, which, though closely resembling the well-known Valkeria in general appearance, presents an arrangement of the tentacles so remarkable that it can only be referred to a new genus. I suspect that it may prove identical with the form which I have already characterized under the name of Valkeria tremula*. At least there is a striking agreement between the two in the shape and size of the zoœcia, and the manner in which the colonies are distributed on the creeping stolon; and as I was unable to make a thorough examination of the polypide of Valkeria tremula, the peculiarity in the tentacles, supposing it to exist, might readily have escaped me. This point, however, must be left for future determination.

Class POLYZOA.

Order INFUNDIBULATA.

Suborder CTENOSTOMATA, Busk.

Family Vesiculariidæ.

Genus CAMPYLONEMA, Hincks.

Der. κάμπύλος, bent, and νημα, a thread (tentacle).

Generic character.—Polyzoary a filiform creeping stolon, on which the zoecia are distributed at intervals in groups; zoecia erect, sessile; polypides with eight tentacles, two of which are bent outwards for about two thirds of their length, so as to interrupt the circle of arms on one side; no gizzard.

Campylonema tremulum, n. sp.

Zoœcia very small and slender, oblong, tapering off to a point below.

The remarkable arrangement of the tentacles is the one point of difference between this form and Valkeria. The abrupt reversion of two of the arms destroys the circular form of the tentacular verticil, and gives it somewhat the shape of a horseshoe. Six of the arms stand erect as usual; the other two are thrown back, so that on one side the circle is broken. The flexure of the tentacles takes place at about a third of the whole height from the base; this peculiarity gives a very remark-

* "Catalogue of the Zoophytes of South Devon and South Cornwall," p. 58, pl. xii. fig. 9 (Ann. Nat. Hist. 1862, ser. 3, vol. ix. p. 472).

able and distinctive appearance to the polypide. The zoœcia are slender, and taper off very decidedly below; when the polypide is retracted they droop a little to one side, and rise into an erect position when it expands.

The polypides are extremely minute and delicate, and very nimble in their habits; those of Valkeria uva appeared coarse and clumsy beside them. They are destitute of a gizzard, and

present altogether a very simple structure.

EXPLANATION OF THE PLATES.

PLATE XX.

Fig. 1. One of the lateral sarcothecæ (nematophores) of Aglaophenia pluma, Linn., showing the thread-cells in action: a, the superior lobe of the sarcostyle (s), which bears the thread-cells; b, the inferior lobe, from which the extensile processes arise; c, the ectoderm of the comosarc, from which the sarcostyle originates;

d, the chitinous cup of the sarcotheca.

Fig. 2. The bithalamic sarcotheca of Plumularia setacea, Ellis, showing one of the extensile processes (pseudopodia) given off from the sarcostyle: a, the superior lobe with thread-cells; b, the extensile process; x, the terminal cup-shaped chamber of the sarcotheca, in which the two lobes are lodged; y, the inferior tubular chamber.

Fig. 3. The same, showing one of the processes (b) dividing into two branches, of which one tends upwards and the other downwards. Fig. 3'. The same, showing a process with bulbous dilatation (b): a, the

superior lobe; ε , the sarcostyle.

Fig. 4. Campanularia neglecta, Alder: x, a "fission-frustule" in course of

formation.

Fig. 5. Campylonema tremulum, Hincks, highly magnified, with one of the polypides expanded, showing the peculiar arrangement of the tentacles.

PLATE XXI.

Fig. 1. Plumularia cornu-copiæ, Hincks, natural size.

Fig. 2. A portion of one of the plumes, magnified.

Fig. 3. Two gonothecæ, borne on a portion of the main stem.

Fig. 4. A calycle of Plumularia Catharina, Johnston, showing the pedunculate sarcotheca (x).

Fig. 5. A gonotheca (female) of Plumularia Catharina.

Fig. 6. The planoblast of Cladonema radiatum, Dujardin, in an early stage of development.

LVI.—Notice of some Species of Fishes from the Philippine Islands. By Dr. A. GÜNTHER.

THE British Museum has recently obtained a series of the fishes collected by Dr. Adolf Bernhard Meyer in the Philippine Islands. The following appear to be undescribed:-

Platycephalus fasciatus.

D. 1 | 8 | 11. A. 11. L. lat. ca 100.

The angle of the præoperculum is armed with three spines,